

me

09c 0 07-10-07
#2

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re Application of: Richard M. Kris et al.

Serial No.: 09/885,973

Group Art Unit: Not Assigned

Filed: June 22, 2001

Examiner: Not Assigned

For: HIGH THROUGHPUT ASSAY SYSTEM USING MASS SPECTROMETRY

INFORMATION DISCLOSURE STATEMENT UNDER 37 CFR § 1.97

Assistant Commissioner for Patents
Washington, D. C. 20231

Sir:

CITED MATERIALS

Applicant(s) wish to disclose the following information, listed in the attached form PTO-1449.

- ☒ In accordance with 37 C.F.R. §1.98(d), copies of materials listed but not attached were cited in ancestor application Serial Nos. 09/218,166 and PCT/US99/30515.
- ☒ Copies of materials listed but not attached were cited in an International Search Report dated 6/3/01; receipt of any International Search Report and copies of references were confirmed by the PCT International Division of the U.S. PTO.
- ☐ Also included are the pending U.S. applications listed below, copies of which are attached:

FEES

- ☒ No fee is required for this Information Disclosure Statement because:
 - ☐ This Information Disclosure Statement is being filed within three months of the filing date of a national application (other than a CPA) under § 1.53(d) or within 3 months of the date of entry of the national stage under § 1.491 in an international application;
 - ☒ This Information Disclosure Statement is being filed before the mailing of a first action on the merits;
 - ☐ This Information Disclosure Statement is being filed after a first action on the merits but before the mailing date of any of a final action under § 1.113, a notice of allowance under § 1.311, or an action that closes prosecution in the application, and is accompanied by a certification below.

- ☐ A fee is required for this Information Disclosure Statement:
- ☐ This Information Disclosure Statement is being filed after a first action on the merits but before the mailing date of any of a final action under § 1.113, a notice of allowance under § 1.311 or an action that closes prosecution, and is accompanied by the fee set forth in §1.17(p).
- ☐ This Information Disclosure Statement is being filed after the mailing date of a final rejection or a notice of allowance under § 1.311 or an action that closes prosecution, but before the payment of the issue fee, and is accompanied by the fee set forth in § 1.17(p) and a certification below.

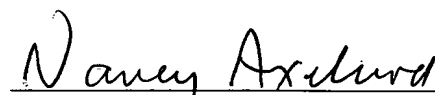
CERTIFICATION

- ☐ Each item of information contained in this Information Disclosure Statement was cited in a communication from a foreign patent office in a counterpart foreign application not more than three months prior to the filing of this statement.
- ☐ No item of information contained in this Information Disclosure Statement was cited in a communication from a foreign patent office in a counterpart foreign application and, to the knowledge of the undersigned, having made reasonable inquiry, was known to any individual designated in 37 CFR § 1.56(c), more than three months prior to the filing of this statement.

DEPOSIT ACCOUNT

If appropriate, attached is a check in the amount of \$_____. However, the Commissioner is hereby authorized to charge fees under 37 CFR 1.16 and 1.17 which may be required to facilitate this filing, or credit any overpayment to Deposit Account #13-3402, two copies of this paper are attached for this purpose.

Respectfully submitted,



Nancy J. Axelrod
Registration No. 44,014
Attorney/Agent for Applicants

MILLEN, WHITE, ZELANO
& BRANIGAN, P.C.
Arlington Courthouse Plaza I
2200 Clarendon Blvd. Suite 1400
Arlington, Virginia 22201
Telephone: (703) 243-6333
Facsimile: (703) 243-6410

Attorney Docket No.: NEOGEN-1 WO P2 C2

Date: July 24, 2001

K:\Neogen\1\Neogen1-P2\Wo\c2\Information Disclosure Statement.doc

Form PTO-1449 U.S. DEPARTMENT OF COMMERCE PATENT AND TRADEMARK OFFICE INFORMATION DISCLOSURE STATEMENT BY APPLICANT (Use several sheets if necessary)	ATTY. DKT. NO. NEOGEN 1WO P2 C2	SERIAL NO. 09/885,973
	APPLICANT KRIS ET AL.	
	FILING DATE June 22, 2001	GROUP Unassigned

U.S. PATENT DOCUMENTS

Examiner Initial	Document Number	Date	Name	Class	Subclass	Filing Date
AA	5,545,531	08/13/96	Rava et al.			06/07/95
AB	5,547,839	08/20/96	Dower et al.			12/06/90
AC	5,324,633	06/28/94	Fodor et al.			11/22/91
AD	5,510,270	04/23/96	Fodor et al.			09/30/92
AE	5,143,854	09/01/92	Pirrung et al.			03/07/90
AF	5,482,867	01/09/96	Barrett et al.			04/23/93
AG	5,661,028	08/26/97	Foote			09/29/95
AH	5,770,370	06/23/98	Kumar			06/14/96
AI	5,605,798	02/25/97	Köster			03/17/95
AI(1)	5,744,305	04/28/98	Fodor et al.			06/06/95

FOREIGN PATENT DOCUMENTS

Examiner Initial	Document Number	Date	Country	Class	Subclass	Translation	
						Yes	No
AJ	97/07245	02/27/97	PCT			x	
AK	89/11548	11/30/89	PCT			x	
AL	97/05277	02/13/97	PCT				x
AP	97/10365	03/20/97	PCT			x	

OTHER DOCUMENTS (Including Author, Title, Date, Pertinent Pages, Etc.)

AQ	Alper, "Weighing DNA for Fast Genetic Diagnosis", <i>Science</i> , Vol. 279, 27 March 1998, pp. 2044-2045.
AR	Anderson et al., "Polynucleotide Arrays for Genetic Sequence Analysis", <i>Topics in Current Chemistry</i> , Vol. 194, 1998, pp. 118-129.
AS	Beattie et al., "Advances in Genosensor Research", <i>Clinical Chemistry</i> , Vol. 41, No. 5, 1995, pp. 700-706.
AT	Chee et al., "Accessing Genetic Information with High-Density DNA Arrays", <i>Science</i> , Vol. 274, 25 October 1996, pp. 610-614.

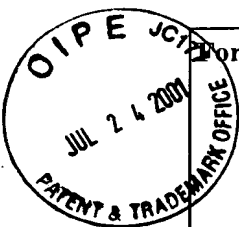
Examiner	Date Considered
----------	-----------------





Form PTO-1449		U.S. DEPARTMENT OF COMMERCE PATENT AND TRADEMARK OFFICE		ATTY. DKT. NO. NEOGEN 1WO P2 C2	SERIAL NO. 09/885,973
INFORMATION DISCLOSURE STATEMENT BY APPLICANT (Use several sheets if necessary)				APPLICANT KRIS ET AL.	
				FILING DATE June 22, 2001	GROUP Unassigned
AU	Chetverin et al., "Oligonucleotide Arrays: New Concepts and Possibilities", <i>Bio/Technology</i> , Vol. 12, 12 November 1994, pp. 1093-1099.				
AV	DeRisi et al., "Use of a cDNA Microarray to Analyse Gene Expression Patterns in Human Cancer", <i>Nature Genetics</i> , Vol. 14, December 1996, pp. 457-460.				
AW	Eggers et al., "A Microchip for Quantitative Detection...", <i>BioTechniques</i> , Vol. 17, No. 3 (1994), pp. 516-524.				
AX	Eggers et al., "A Review of Microfabricated Devices for Gene-Based Diagnostics", <i>Hematologic Pathology</i> 9(1), 1-15 (1995).				
AY	Gautheret et al., "Alternate Polyadenylation in Human nRNAs...", <i>Genome Research</i> , 8:524-530 (1998).				
AZ	Maskos et al., "A Novel Method for the Parallel Analysis of Multiple Mutations in Multiple Samples", <i>Nucleic Acids Research</i> , 1993, Vol. 21, No. 9, pp. 2269-2270.				
AA1	Hoheisel, "Oligomer-chip Technology", <i>BioTechnology TIBTECH</i> , Nov. 1997, Vol. 15, No. 1 (166), pp. 465-469.				
AA2	Lipshutz et al., "Using Oligonucleotide Probe Arrays to Access Genetic Diversity", <i>BioTechniques</i> , Vol. 19, No. 3 (1995), pp. 442-447.				
AA3	Lockhart et al., "Expression Monitoring by Hybridization to High-Density Oligonucleotide Arrays", <i>Nature Biotechnology</i> , Vol. 14, December 1996, pp. 1675-1680.				
AA4	Marshall et al., "DNA chips: An array of possibilities", <i>Nature Biotechnology</i> , vol. 16, January 1998, pp. 27-31.				
AA5	Niemeyer et al., "Oligonucleotide-directed self-assembly of proteins...", <i>Nucleic Acids Research</i> , 1994, Vol. 22, No. 25, pp. 5530-5539.				
AA6	O'Donnell-Maloney et al., "The Development of Microfabricated Arrays for DNA Sequencing and Analysis", <i>TIBTECH</i> , Vol. 14, Oct. 1996				
AA7	Sapolsky et al., "Mapping Genomic Library Clones Using Oligonucleotide Arrays", <i>Genomics</i> , 33, 445-456 (1996).				
AA8	Schullek et al., "A High-Density Screening Format for Encoded Combinatorial Libraries...", <i>Analytical Biochemistry</i> , 246, 20-29 (1997).				
AA9	Shoemaker et al., "Quantitative Phenotypic Analysis of Yeast Deletion...", <i>Nature Genetics</i> , Vol. 14, December 1996, pp. 450-456.				
AB1	Shuber et al., "High Throughput Parallel Analysis of Hundreds of Patient Samples...", <i>Human Molecular Genetics</i> , 1997, Vol. 6, No. 3, pp. 337-347.				
AB2	Southern, "DNA chips: analysing sequence by hybridization...", <i>Trends in GENETICS</i> , Vol. 12, 1996.				
AB3	Southern, "High-density gridding: techniques and applications", <i>Current Opinion in Biotechnology</i> , Vol. 7, No. 1, February 1996, pp. 85-88.				

Examiner	Date Considered



Form PTO-1449

**U.S. DEPARTMENT OF COMMERCE
PATENT AND TRADEMARK OFFICE**
**INFORMATION DISCLOSURE STATEMENT
BY APPLICANT**

(Use several sheets if necessary)

ATTY. DKT. NO.

NEOGEN 1WO P2 C2

APPLICANT

KRIS ET AL.

FILING DATE

June 22, 2001

U.S. PATENT DOCUMENTS

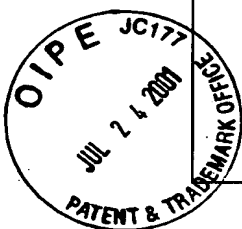
	BF	5,288,609	2/22/94	Engelhardt et al.	435	6	10/30/92
	BG	5,374,524	12/20/94	Miller	435	6	04/27/93
	BH	4,563,419	01/07/86	Ranki et al.	435	6	12/29/83
	BI	4,228,237	10/14/80	Hevey et al.	435	7	09/21/78
	BJ	5,643,730	07/01/97	Banker et al.	435	6	03/14/95
	BK	5,744,305	04/28/98	Fodor et al.	435	6	06/06/95
	BL	5,556,748	09/17/96	Douglas, Allan S.	435	6	
	BM	5,175,270	12/29/92	Nilsen et al.	536	27	
	BN	5,241,060	8/31/93	S. Kline et al.			
	BO	6,083,763	7/4/00	Balch			
	BP	4,716,106	12/29/87	David Chiswell			

FOREIGN PATENT DOCUMENTS

Examiner Initial	Document Number	Date	Country	Class	Subclass	Translation	
						Yes	No
	BN	WO 99/32663	7/1/99	PCT			
	BO	WO 9731256	08/28/97	PCT			
	BP	0698792	02/28/96	EPC			
	BQ	19518217	11/30/95	Germany			
	BR	9727317	07/31/97	PCT			
	BS	0742286	11/13/96	EPC			
	BT	99/28494A	6/10/99	WO			
	BU	97/47640	12/18/97	WO			
	BV	0846776A	6/10/98	EP			
	BW	00/37684A	6/29/00	WO			

Examiner**Date Considered**

Form PTO-1449	U.S. DEPARTMENT OF COMMERCE PATENT AND TRADEMARK OFFICE	ATTY. DKT. NO. NEOGEN 1WO P2 C2
INFORMATION DISCLOSURE STATEMENT BY APPLICANT (Use several sheets if necessary)		APPLICANT KRIS ET AL.
		FILING DATE June 22, 2001


OTHER DOCUMENTS (Including Author, Title, Date, Pertinent Pages, Etc.)

BX	Kowalak, J., et al. "Posttranscriptional Modification of the Central Loop of Domain V in <i>Escherichia coli</i> 23 S Ribosomal RNA", <i>The Journal of Biological Chemistry</i> , Vol. 270, No. 30, July 28, 1995, pp. 17758-17764.	
BY	Gautheret, D., et al. "Alternate Polyadenylation in Human mRNAs: A Large-Scale Analysis by EST Clustering", <i>Genome Research</i> , Vol. 8, 1998, pp. 524-530.	

U.S. PATENT DOCUMENTS

BZ	4,751,177	6/14/88	Stabinsky	435	6
CA	4,994,373	2/19/91	Stavrianopoulos et al.	435	6
CB	5,789,165	8/4/98	Oku et al.	435	6
CC	4,925,785	5/15/90	Wang et al.	435	6
CD	4,868,105	9/19/89	Urdea et al.	435	6
CE	5,445,943	8/29/95	Fodor et al.		

FOREIGN PATENT DOCUMENTS

Examiner Initial	Document Number	Date	Country	Class	Subclass	Translation	
						Yes	No
CF	WO 97/33000	9/12/97	PCT				
CG	WO 96/29431	9/26/96	PCT				
CH	EP 0 721 016	7/10/96	EP				
CI	WO 91/15600	10/17/91	PCT				

Examiner	Date Considered
----------	-----------------

Form PTO-1449

U.S. DEPARTMENT OF COMMERCE
PATENT AND TRADEMARK OFFICE

ATTY. DKT. NO.

NEOGEN 1WO P2 C2

APPLICANT

KRIS ET AL.

FILING DATE

June 22, 2001

INFORMATION DISCLOSURE STATEMENT
BY APPLICANT

(Use several sheets if necessary)

OTHER DOCUMENTS (Including Author, Title, Date, Pertinent Pages, Etc.)

CL	Sapolsky, R., et al. "Mapping Genomic Library Clones Using Oligonucleotide Arrays", <i>Genomics</i> , Vol. 33, 1996, pp. 445-456.
CM	Kowalak et al., "Posttranscriptional Modification of the Central Loop of Domain V...", <i>The Journal of Biological Chemistry</i> , Vol. 270, No. 30, Issue of July 28, pp. 17758-17765, 1995.
CN	Maier et al. (1997), "Drugs Discovery Today", Vol. 2 (8), pp. 315-324.
CO	D.P. Little et al., <i>Anal. Chem.</i> , Vol. 69, No. 22, pp. 4540-4546 (1997): "MALDI on a Chip: Analysis of Arrays of Low-Femtomole to Subfemtomole Quantities of..."
CP	D. Sarracino et al., <i>Bioorganic & Medicinal Chemistry Letters</i> , Vol. 6, No. 21, pp. 2543-2548 (1996): "Quantitative Maldi-tof MS of Oligonucleotides and a Nuclease Assay"
CQ	K. Tang et al., <i>Rapid Comm. in Mass Spectrometry</i> , Vol. 8, pp. 183-186 (1994): "Matrix-assisted laser desorption/ionization of restriction enzyme-digested DNA"
CR	A.C. Pease et al., <i>Proc. Natl. Acad. Sci. USA</i> , Vol. 91, pp. 5022-5026 (1994): "Light-generated oligonucleotide arrays for rapid DNA sequence analysis"
CS	International Search Report for PCT/US99/30515
CT	International Search Report for PCT/US98/27191

Examiner

Date Considered